

### Abstract of the Invention

A method for diagnosing an HIV-2 (LAV-II) infection and a kit containing reagents for the same is disclosed. These reagents include cDNA probes which are capable of hybridizing to at least a portion of the genome of HIV-2. In one embodiment, the DNA probes are capable of hybridizing to the entire genome of HIV-2. These reagents also include polypeptides encoded by some of these DNA sequences.

1. A method for diagnosing an HIV-2 (LAV-II) infection, comprising the steps of:  
a) providing a sample suspected of containing HIV-2;  
b) hybridizing the sample with a cDNA probe capable of hybridizing to at least a portion of the genome of HIV-2;  
c) detecting the hybridization product.  
2. The method of claim 1, wherein the cDNA probe is capable of hybridizing to the entire genome of HIV-2.  
3. A kit for diagnosing an HIV-2 (LAV-II) infection, comprising:  
a) a cDNA probe capable of hybridizing to at least a portion of the genome of HIV-2;  
b) a polypeptide encoded by one of the DNA sequences of the HIV-2 genome.  
4. The kit of claim 3, wherein the cDNA probe is capable of hybridizing to the entire genome of HIV-2.  
5. The kit of claim 3, wherein the polypeptide is encoded by a DNA sequence of the HIV-2 genome.